

Claim Listing:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claim 1. (Currently Amended) A dermal composition comprising a blend of:

- (a) a polymer composition of two or more polymers which includes:
 - (i) a first acrylic-based polymer having substantially no functional groups and a first ~~functionality~~ solubility parameter; and
 - (ii) a second acrylic-based polymer having a second functionality and solubility parameter, to provide an acrylic-based polymer combination having a net solubility parameter; and
- (b) a therapeutically effective amount of one or more drugs incorporated into the polymer composition.

Claim 2. (Previously Presented) A dermal composition as claimed in claim 1, wherein the first acrylic-based polymer provides a lower drug solubility than the second acrylic-based polymer.

Claim 3. (Original) A dermal composition as claimed in claim 2, wherein the first acrylic-based polymer is present in an amount to provide a flux of the one or more drugs in the dermal drug delivery composition which is greater than a composition based solely on the second acrylic-based polymer.

Claim 4. (Original) A dermal composition as claimed in claim 2, wherein the amount of the second acrylic-based polymer is in the range of 5-95 weight % and the amount of the first acrylic-based polymer is in the range of 95 to 5 % by weight, all based on the total dry weight of the polymer.

Claim 5. (Original) A dermal composition as claimed in claim 2, wherein the amount of the second acrylic-based polymer is in the range of 20-75 weight % and the amount of the first acrylic-based polymer is in the range of 75 to 20 % by weight, all based on the total dry weight of the polymer.

Claim 6. (Previously Presented) A dermal composition as claimed in claim 1, wherein the second acrylic-based polymer has functional groups.

Claim 7. (Original) A dermal composition as claimed in claim 6, wherein the second acrylic-based polymer has carboxyl and/or hydroxy functional groups.

Claim 8. (Previously Presented) A dermal composition as claimed in claim 6, wherein the second acrylic-based polymer is present in an amount to provide an increased saturation concentration in the dermal drug delivery composition.

Claim 9. (Original) A dermal composition as claimed in claim 6, wherein the functional groups are provided by monomer units containing functional groups which are incorporated into the second acrylic-based polymer in an amount of from 0.1 to 20 % by weight, based on the dry weight of the second acrylic-based polymer.

Claim 10. (Original) A dermal composition as claimed in claim 9, wherein the functional monomers are incorporated into the second acrylic-based polymer in an amount of from 0.1 to 8 % by weight, based on the dry weight of the second acrylic-based polymer.

Claim 11. (Currently Amended) A dermal composition as claimed in claim 1, wherein the polymer composition (a) ~~at least two polymer polymers~~ contains substantially only the first and second acrylic-based polymers.

Claim 12. (Original) A dermal composition as claimed in claim 7, wherein the second acrylic-based polymer includes carboxyl functional groups.

Claim 13. (Original) A dermal composition as claimed in claim 12, wherein the one or more drug includes haloperidol.

Claim 14. (Original) A dermal composition as claimed in claim 13, wherein the carboxyl functional acrylic-based polymer includes 0.1 to 10 % by weight of carboxyl functional monomer units.

Claim 15. (Original) A dermal composition as claimed in claim 14, wherein the carboxyl functional acrylic-based polymer is a crosslinked vinyl acetate acrylic-based polymer.

Claim 16. (Original) A dermal composition as claimed in claim 12, wherein the one or more drug includes nicotine.

Claim 17. (Previously Presented) A dermal system as claimed in claim 16, wherein the carboxyl functional acrylic-based polymer includes 0.1 to 12 % by weight of carboxyl functional monomer units.

Claim 18. (Previously Presented) A dermal system as claimed in claim 16, wherein the carboxyl functional monomer units are acrylic acid.

Claims 19-23. (Canceled).

Claim 24. (Previously Presented) A dermal system as claimed in claim 6, wherein the drug includes scopolamine.

Claim 25. (Previously Presented) A dermal system as claimed in claim 24, wherein the second acrylic includes carboxyl groups.

Claim 26. (Currently Amended) A method of producing a dermal composition, comprising the steps of:

- (1) producing a blend of:
 - (a) a polymer composition of two or more polymers which includes:
 - (i) a first acrylic-based polymer having a—substantially no functional groups and first solubility parameter; and
 - (ii) a second acrylic-based polymer having a second solubility parameter,
wherein the first and second acrylic-based polymers are blended in proportions to provide a net solubility parameter; and
 - (b) a therapeutically effective amount of one or more drugs incorporated into the polymer composition;
- (2) forming the blend into a polymer matrix; and
- (3) drying the polymer matrix to remove the solvent system to form the dermal composition.

Claim 27. (Previously Presented) A method as claimed in claim 26, wherein the first acrylic-based polymer provides a selectable lower solubility parameter.

Claim 28. (Original) A method as claimed in claim 26, further comprising the step of applying a backing material to one side of the composition, the backing material being substantially impermeable to the drug contained therein.

Claim 29. (Original) A method as claimed in claim 28, further comprising the step of applying a release liner to a surface of the composition opposite said backing material.

Claim 30. (Currently Amended) A method of controlling the flux of a drug from a dermal drug delivery composition, comprising the steps of:

- (a) selecting at least two ~~polymer~~ polymers which includes:
 - (i) a first acrylic-based polymer having a functionality of a first type and a solubility parameter; and
 - (ii) a second acrylic-based polymer having a functionality of a second type and a solubility parameter,wherein said first and second acrylic-based polymers provide a net solubility;
- (b) combining the at least two acrylic-based polymers with a therapeutically effective amount of one or more drugs to form the dermal drug delivery composition, wherein the one or more drugs have a flux which is determined by the net solubility in the composition and is different than the flux of a composition produced solely from said first or second acrylic-based polymers alone.

Claim 31. (Withdrawn) A dermal composition comprising two or more polymers including a first acrylic-based polymer having first functional groups,

a second acrylic-based polymer having second functional groups differing in a selected manner from the first functional groups,

wherein the first and second acrylic-based polymers are selected in amounts based upon an amount of one or more drugs incorporated into the polymer composition to provide selectable modulation of flux of the drug across a dermal surface.

Claim 32. (Withdrawn) A pressure-sensitive dermal drug delivery composition as claimed in claim 31, wherein the first acrylic-based polymer includes a first functional group and the second acrylic-based polymer includes a second functional group, wherein the first and second functional groups are different.

Claim 33. (Withdrawn) A pressure-sensitive dermal drug delivery composition as claimed in claim 32, wherein the first functional group is a hydroxy functional monomer unit and the second functional group is a carboxyl functional monomer unit.

Claim 34. (Withdrawn) A dermal composition as claimed in claim 33, wherein the one or more drug includes clonidine.

Claim 35. (Withdrawn) A dermal composition as claimed in claim 34, wherein the carboxyl functional acrylic-based polymer includes 0.1 to 12 % by weight of carboxyl containing monomer units and the hydroxy functional acrylic-based polymer includes 0.1 to 10 % by weight of hydroxy containing monomer units.

Claim 36. (Withdrawn) A dermal composition as claimed in claim 34, wherein the carboxyl containing functional monomer units are acrylic acid, and the hydroxy containing monomer units are 2-hydroxy ethyl acrylate.